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Creating Smart and Agile Business Systems with The Business Rules Approach

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As businesses change and grow larger, their business processes and models become ever more complex and harder to maintain. Modeling complicated processes into the business systems that support and sustain them is a challenge. In order for modeling to succeed, seamless collaboration between the business and the IT is required. Tools and systems for enabling fluent communication between the employees are needed to support this cooperation. With the help of these tools, constant development and improvement can be done on the business systems and the business processes.

This thesis studies the *Business Rules* approach. It enables businesses to build and develop business systems in a way that they support the business and its processes. It also helps employees to manage the business processes effectively. Business systems implemented according to this approach have the deduction logic of their business processes extracted into business rules. With the help of business rules, business experts and analysts can direct and manage the business processes without any technical knowledge about the systems.

The examination of the approach begins with an introduction to the business rules basics. The thesis goes through a few different architectural solutions for implementing a business rules system. Also, the components of a business rules system are studied. Finally, the studied aspects of the business rules approach is compared against a case study. The studies in this thesis are done from the perspective of improving the collaboration between the business and the IT.

This thesis concludes that the business system in the case study utilizes business rules, but it does not fully comply with the guidelines of the business rules approach. The system especially lacks tools for managing business rules. Therefore, it does not provide strong foundations for enabling and improving cooperation between the business and the IT departments.

Keywords: Business Rules, Business Rules Management System, Business Rules Engine, Business Process Management, Enterprise Decision Management